New chorological data on the Bulgarian higher flora

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While studying in 1998 the flora of Northeast Bulgaria (in the vicinity of Provadia) and of Sofia region, 15 taxa of vascular plants were identified, so far unknown for these areas. A new species was found both in the floral regions of Strouma Valley and of Mt Strandzha. One taxon was reported for the Mesta Valley, collected in 1941. The herbaceous materials were stored in the Herbarium of the St Kliment Ohridski University of Sofia (SO).

6500,26150. *Polypogon monspeliensis* (L.) Desf., NH-38; SC (DD,VV), SO-99501. Fig. 1. No 4.

Northeast Bulgaria: along a small stream near the highway to Geosol Company, Provadia, 18.09. 1998. This hydrophyte has been so far known from the floral regions of the Black Sea Coast, Danubian Plain, Strouma Valley, Eastern Rhodopes, Thracian Lowland, Toundzha Hilly Country, and Mt Strandzha (KOJUHAROV, 1992).

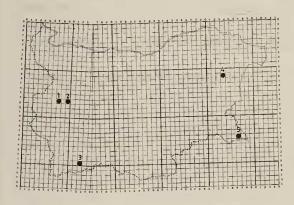


Fig. 1. New sources for the floral regions of Northeast Bulgaria, Sofia region, Strouma Valley and Mt Strandzha

2030.09325. *Cleistogenes serotina* (L.) Keng., NH-38; SC (DD,VV), SO-99502. Fig. 1. No 4.

Northeast Bulgaria: in calcareous rocky places above the administrative building of Geosol Company, Provadia, 17.09.1998. This Pontic-Mediterranean element has been so far known from regions the floral Danubian Plain, Forebalkan, Znepole, Sofia. Eastern Rhodopes, Thracian Lowland, and Toundzha Hilly Country (Kojuharov, 1992).

6430.25790. *Poa angustifolia* L., GN-02; SV (I. Hristov), SO-99517. Fig. 1. No 2. Sofia region: in moist grassy places between Ravno Pole village and Elin Pelin town, 12.07.1998. This taxon has been so far known from the floral regions of the Balkan Range, Central and Eastern Rhodopes and Mt Slavyanka (KOJUHAROV, 1992).

6670.27020. Puccinellia convoluta Grsb., NH-38; SC (DD,VV), SO-99503. Fig. 1. No 4.

Northeast Bulgaria: in saline grassy places within and around the territory of Geosol Company - Provadia, 18.09.1998. This species has been so far known from the floral regions of the Black Sea Coast, Danubian Plain, Strouma Valley and Mt Strandzha (KOJUHAROV, 1992).

0400.02050. Amaranthus deflexus L., NG-65; SC (DD), SO-99519. Fig. 1. No 5. Mt Strandzha: Kosti village, nearby the Forestry building, 8.06.1998. This adventive species has been so far known from the floral regions of the Danubian Plain and Thracian Lowland, Black Sea Coast, Sofia region, Strouma Valley, and Toundzha Hilly Country (ANDREEV, 1992).

0400.02080. Amaranthus hypochondriacus L., SC (DD,VV), SO-99520. Fig. 1. No 1.

Sofia region: in grassy places near the TV tower in the Borisova Garden, 19.08.1998. This American geo-element has been so far known from the floral regions of the Danubian Plain and Thraican Lowland (ANDREEV, 1992).

76760.32860. Spergularia marina (L.) Grsb., NH-38; SC (DD,VV), SO-99507. Fig. 1. No 4.

Northeast Bulgaria: on the territory in and around the salt pits of Geosol Company - Provadia, with blossoms and fruits, 18.09.1998. This halophyte has been so far known from the floral regions of the Black Sea Coast, Danubian Plain, Strouma Valley, Thracian Lowland and Toundzha Hilly Country (PETROVA, 1992).

4950.4710. *Lunaria annua* L. ssp. *pachyrhiza* (**Borb.**) **Hay.**, GM-20, SV (B.Kitanov) SO-99521. Fig. 1. No 3.

Mesta Valley: on wintercrops in the Nevrokop Plain, with blossoms, 10.05.1941. This sub-Mediterranean element has been so far known from the floral regions of Northeast Bulgaria, the Forebalkan, Balkan Range and Mt Vitosha, West Frontier Mts, Strouma Valley, Rila Mts, Mt Sredna Gora, and Western and Central Rhodopes (ANCHEV, 1992).

3040. *Epilobium obscurum* Schreb., SC (DD,VV), SO-99523. Fig. 1. No 1. Sofia region: in grassy places near the TV tower in the Borisova Garden, with

blossoms, 19.08.1998. This hydrophyte has been so far known from the floral

regions of the Balkan Range and Mt Vitosha, Strouma Valley, Rila Mts, and Rhodopes (ANDREEV, 1992).

3380.13930. *Foeniculum wulgaris* Mill., FM-90; SC(DD), SO-99524 Fig. 1. No 3. Strouma Valley: close to the town of Melnik, near the foothpath to Rozhen Monastery, with blossoms, 16.06.1998. According to Peev (1982), this Mediterranean element was known from the Strouma Valley. However, in 1992 the same author reported chorologically for this species only the Black Sea Coast and Thracian Lowland.

3680.15750. *Goniolimon besserianum* (Schult. ex Rchb.) Kusn., NH-38; SC(DD,VV), SO-99525 Fig. 1. No 4.

Northeast Bulgaria: in calcareous rocky places above the administrative building of Geosol Company, Provadia, with blossoms, 17.09.1998. This Pontic species has been so far known from the Black Sea Coast (Anchev, 1992).

2880.11890. *Ecbalium elaterium* (L.) A. Richt., NH-38; SC (DD,VV), SO-99510, SO-99527 Fig. 1. No 4.

Northeast Bulgaria: along the right bank of river Provadia after Geosol Company, Provadia; in the river bed and around the Ovech Fortress, with blossoms and fruits, 18.09.1998. This halophyte has been so far known from the floral regions of the Black Sea Coast, Strouma Valley and Thracian Lowland (ANDREEV, 1992).

0850.03930. Aster tripolium L., NH-38; SC (DD,VV), SO-99511, 99512. Fig. 1. No 4. Northeast Bulgaria: arround the salt pits of Geosol Company, Provadia; along the right bank of river Provadia near the Company grounds, with blossoms, 17.09.1998. This halophyte has been so far known from the floral regions of the Black Sea Coast and Danubian Plain (PEEV, 1992).

 $1560.06540.\ Carduus\ hamulosus\ Ehrh.,\ FN-73,\ SC\ (DD,VV),\ SO-99513.$ Fig. 1. No 1.

Sofia region: in grassy places westwards of Ivanyane village, Sofia region, with blossoms, 7.10.1998. This species has been so far known from Northeast Bulgaria (Pefv. 1992).

1860.07560. *Centaurea euvina* Vel., NH-38; SC (DD,VV), SO-99514 Fig. 1. No 4. Northeast Bulgaria: around calcareous rocks above the administrative building of Geosol Company, Provadia, with blossoms, 17.09.1998. This Pontic element has been so far known from the Black Sea Coast floral region (PEEV, 1992).

1860.08020.1880. *Centaurea rutifolia* S. et S. subsp. *rutifolia*, FN-73, SC (DD,VV), SO-99515. Fig. 1. No 1.

Sofia region: in grassy places westward from Ivanyane village, Sofia region, with blossoms, 7.10.1998. This species has been so far known from the floral regions of the Black Sea Coast and the Eastern Balkan Range (PEEV, 1992).

6310.25220. *Picris echioides* L., NH-38, SC (DD,VV), SO-99468. Fig. 1. No 4.

Northeast Bulgaria: in sandy places near Geosol Company, Provadia, with blossoms and fruits, 18.09.1998. This Mediterranean element has been so far known from the floral regions of the Black Sea Coast and Thracian Lowland (PEEV, 1992).

3950.16780. *Hieracium laevigatum* Willd., FN-73, SC (DD,VV), SO-99516. Fig. 1. No 1.

Sofia region: in moist grassy places, west of Ivanyane village, Sofia region, with blossoms, 7.10.1998. This Boreal element has been so far known from the floral region of the West and Central Balkan Range (PEEV, 1992).

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Нови данни за хорологията на висшата флора на България

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(Резюме)

Установени са находищата на 15 таксона висши растения, неизвестни досега за растително географския район на Североизточна България (околностите на град Провадия) и Софийски район. Открит е по един нов вид за флорните райони на Струмска долина и Странджа планина. Съобщаваме един нов таксон за долината на р. Места, ненамиран от 1941 година до настоящото изследване.